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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,220	03/19/2004	Ralf-Peter Peters	A-8981 . RNOMP / sbs	6089

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HOFFMAN, WASSON & GITLER, P.C.
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EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/804,220

Applicant(s)

PETERS ET AL.

Examiner

Joseph W. Drodge

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond to the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,9,13-15 and 17-20 rejected under 35 U.S.C. 102(b) as being anticipated by Brody et al patent 5,922,210. For claims 1 and 20, Brody et al disclose a microstructured separating device for separating liquid with smaller particle or cellular components from liquid containing larger particles, comprising transport channel 4, side channel 5 and filter microstructure 6, larger particles being retained in the transport channel and smaller particles inherently being slowed down by the separating microstructure filter (column 3, lines 50-52, column 7, lines 32-36 and column 8, lines 58-59). ***Diversion of relatively larger particles or other material, and slowed passage of relatively smaller particles/materials is an inherent property of essentially all filtering separating devices.***

The following is also disclosed for dependent claims: passage opening 7 for claim 2, the dimensions for the passage opening being smaller than for the transport channel and being in the micron range (column 4, lines 57-60 and column 5, lines 18-21) for claims 3 and 4, the filter constituting a cross-piece orientation relative to branch channel for claims 9 and 13, branch or "removal" channel 7 and collecting areas 1,2 and 3 for claims 14,15 and 17-20.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al in view of Wilding et al patent 5,635,358 and/or Wiegler et al patent 6,454,945.

Claims 5-8 differ in requiring a plurality of microstructures and corresponding passage openings into branch channels. Such is suggested by the plurality of branch channels 24 and microfilters 28 of Wilding et al in figures 1 and 5-10 and column 7, lines 15-51 and/or by the plurality of branch channels 26 and 28 shown in figure 4 and discussed at column 23, lines 22-43 of Wiegler et al. It would have been obvious to one of ordinary skill in the art to have provided a plurality of branch channels, microstructures and side passage openings in the Brody et al device, as taught by Wiegler et al and/or Wilding et al, in order to collect more than one size and/or type of blood particle or cellular component, or plural types of blood cells or components. The branch channels of Wiegler vary in size as do the branch channels containing the microstructures of Wilding et al for claim 7.

Claims 10-12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al in view of Wilding et al patent 5,635,358. Claims 10-12 differ from Brody in requiring the microstructure to be in the form of a ramp, stairs or column. Wilding et al teach such embodiments at column 7 regarding microstructure filters 28 for the purpose of providing comminuting of the cellular components being collected and controlling flow rates through the branch channels.

Claim 16 differs from Brody in requiring the collecting element to contain reagents. Such reagents are suggested by Wilding et al at column 9, lines 40-49 for purposes of preparing collected blood components for assay sampling preparation and analysis.

Applicant's arguments filed on 07 December 2006 have been fully considered but they are not persuasive. It is argued that in Brody, there is no disclosure of smaller particles being slowed but allowed to pass through the microfilter. However, column 3, lines 50-67 infer that particles smaller than those of a discrete size are not separated from the passing fluid. In column 7, lines 31-36, it is stated that "analytes such as a virus, DNA sequence, antigen, microorganism, or other factor are analyzed in the filtrate (small organic or biochemical material or particles thus pass through the filter with the filtrate fluid). Column 10, lines 18-25 state that 2.6um size spheres pass through the "barrier" while larger 16 um spheres do not.

It is argued that in the present invention, smaller particles are slowed only due to their mass and "their chromatographic effect" and that there is no well-defined cutoffs with respect to the size of material that may pass through the microstructure. However, it is submitted that the instant apparatus claims do not contain any language reciting structural features commensurate with such concepts. Filters of any size and configuration slow down both the fluid passing therethrough and relatively small size material that is entrained with such fluid, while allowing their passage due to friction, and various fluid flow mechanisms.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

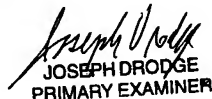
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

January 12, 2007


JOSEPH DRODGE
PRIMARY EXAMINER